TOSHIBA

OWNER'S MANUAL Wide Plasma Display

COLOR STREAM HD®

THEATERWIDE HD®

50HP81

Owner's Record

The model number and serial number are on the back of your display. Record these numbers in the spaces below. Refer to these numbers whenever you communicate with your Toshiba dealer about this display.

Model number: 50HP81
Serial number:



WARNING

RISK OF ELECTRIC SHOCK DO NOT OPEN



WARNING: To reduce the risk of electric shock do not remove cover or back. No user-serviceable parts inside. Refer servicing to qualified service personnel.



The lightning flash with arrow-head within a triangle is intended to tell the user that parts inside the product are a risk of electric shock to persons.



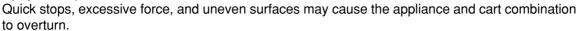
The exclamation point within a triangle is intended to tell the user that important operating and servicing instructions are in the papers with the appliance.

WARNING: To prevent damage which may result in fire or shock hazard, do not expose this appliance to rain or moisture.

- **WARNING:** 1) To prevent electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.
 - 2) Do not remove the grounding pin on the power plug. This apparatus is equipped with a three pin grounding-type power plug. This plug will only fit a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician. Do not defeat the purpose of the grounding plug.

Important Safety Instructions

- 1) Read these instructions.
 - All the safety and operating instructions should be read before the appliance is operated.
- 2) Keep these instructions.
 - The safety and operating instructions should be retained for future reference.
- 3) Heed all warnings.
 - All warnings on the appliance and in the operating instructions should be adhered to.
- 4) Follow all instructions.
 - All operating and use instructions should be followed.
- 5) Do not use this apparatus near water.
 - For example, near a bathtub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like.
- 6) Clean only with a dry cloth.
 - Do not use liquid cleaners or aerosol cleaners. Use a dry cloth for cleaning.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions. Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
 - This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where it exits the apparatus.
- 11) Only use attachments / accessories specified by the Manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart / apparatus combination to avoid injury from tip-over.





- 13) Unplug this apparatus during lightning storms or when unused for long periods of time. This will prevent damage to the product due to lightning and power-line surges.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Dear TOSHIBA Customer

Welcome to the TOSHIBA family of customers. We hope that you will have many years of enjoyment from your new Wide Plasma Display.

To obtain maximum benefit from your set, please read these Instructions before making any adjustments, and retain them for future reference.

Retain your purchase receipt also, and note the model number and serial number of your set in the space provided on the front cover of these instructions.

Note:

Do not allow a still picture to be displayed for an extended period, as this can cause a permanent ghost image to remain on the Wide Plasma Display.

Examples of still pictures include logos, video games, computer images, teletext and images displayed in 4:3 mode.

Trademark Credits

- VGA is a trademark of International Business Machines Corporation.
- S-VGA is a registered trademark of the Video Electronics Standard Association.
 Even if no special notation has been made of company or product trademarks, all trademarks have been fully respected.

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FCC STATEMENT

FCC STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

 This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC CAUTION:

To ensure continued compliance and to avoid possible undesirable interference, the provided ferrite cores must be used when connecting this Wide Plasma Display to video equipment; and maintain at least 15.75" (40 cm) of space from other peripheral devices. Refer to instructions on pages 13 and 16. Any changes or modifications not expressly approved by Toshiba America Consumer Products, Inc. could cause harmful interference and may void the user's authority to operate this device.

FCC Declaration of Conformity

Responsible Party: Toshiba America Consumer Products, Inc.

1420 Toshiba Drive, Lebanon, TN 37087

Contact Source: Toshiba America Consumer Products, Inc.

1420 Toshiba Drive, Lebanon, TN 37087

CANADIAN NOTICE:

This Class B digital apparatus complies with Canadian ICES-003.

Safety Precautions

WARNING

Setup

Do not place the Wide Plasma Display on sloped or unstable surfaces.

• The Wide Plasma Display may fall off or tip over.

Do not place any objects on top of the Wide Plasma Display.

If water spills onto the Wide Plasma Display or foreign objects get inside it, a short-circuit may occur which could
result in fire or electric shock. If any foreign objects get inside the Wide Plasma Display, please consult an
Authorized Service Center.

Do not cover the ventilation holes.

 Doing so may cause the Wide Plasma Display to overheat, which can cause fire or damage to the Wide Plasma Display.

If using the pedestal (optional accessory), leave a space of 3 ¹⁵/₁₆" (10 cm) or more at the top, left and right, 2 ³/₈" (6 cm) or more at the bottom, and 2 ³/₄" (7 cm) or more at the rear. If using some other setting-up method, leave a space of 3 ¹⁵/₁₆" (10 cm) or more at the top, bottom, left and right, and ³/₄" (1.9 cm) or more at the rear.

AC Power Supply Cord

The Wide Plasma Display is designed to operate on 120 V AC, 50/60 Hz.

Securely insert the power cord plug as far as it will go.

• If the plug is not fully inserted, heat may be generated which could cause fire. If the plug is damaged or the wall socket plate is loose, they should not be used.

Do not handle the power cord plug with wet hands.

Doing so may cause electric shock.

Do not do anything that might damage the power cable. When disconnecting the power cable, hold the plug, not the cable.

• Do not make any modifications, place heavy objects on, place near hot objects, heat, bend, twist or forcefully pull the power cable. Doing so may cause damage to the power cable which can cause fire or electric shock. If damage to the cable is suspected, have it repaired at an Authorized Service Center.

If the Wide Plasma Display is not in use for a long period of time, unplug the power cord from the wall outlet.

If problems occur during use

If a problem occurs (such as no picture or no sound), or if smoke or an abnormal odor is detected from the Wide Plasma Display, unplug the power cord immediately.

• Continuous use of the Display under these conditions might cause fire or permanent damage to the unit. Have the Display evaluated at an Authorized Service Center. Service to the Display by any unauthorized personnel is strongly discouraged due to its high voltage and dangerous nature.

If water or foreign objects get inside the Wide Plasma Display, if the Wide Plasma Display is dropped, or if the cabinet becomes damaged, disconnect the power cord plug immediately.

 A short may occur, which could cause fire. Contact an Authorized Service Center for all repairs that need to be made.

⚠ CAUTION

This Wide Plasma Display is for use only with the following optional accessories. Use with any other type of optional accessories may cause instability which could result in the possibility of injury.

(All of the following accessories are manufactured by TOSHIBA Corporation)

- Wall-hanging bracket (vertical) ····· PWB501
- Wall-hanging bracket (angled) ····· PWB502

Always be sure to ask a qualified technician to install and set up accessories.

When using the Wide Plasma Display

Do not bring your hands, face or objects close to the ventilation holes of the Wide Plasma Display.

• The top of the Wide Plasma Display is usually very hot due to the high temperature of exhaust air being released through the ventilation holes. Burns or personal injuries can happen if any body parts are brought too close. Placing any object near the top of the display could also result in heat damages to the object as well as to the Display if its ventilation holes are blocked.

Be sure to disconnect all cables before moving the Wide Plasma Display.

• Moving the Display with its cables attached might damage the cables which, in turn, can cause fire or electric shock.

Disconnect the power plug from the wall outlet as a safety precaution before carrying out any cleaning.

Electric shock can result if this is not done.

Clean the power cable regularly to prevent it from becoming dusty.

• Built-up dust on the power cord plug can increase humidity which might damage the insulation and cause fire. Unplug the cord from the wall outlet and clean it with a dry cloth.

Cleaning and maintenance

The front of the display panel has been specially treated. Wipe the panel surface gently using only a dry, soft, lint-free cloth.

• Do not scratch or hit the surface of the panel with fingernails or other hard objects. Furthermore, avoid contact with volatile substances such as insect sprays, solvents and thinner, otherwise the quality of the surface may be adversely affected.

If the cabinet becomes dirty, wipe it with a soft, dry cloth.

- If the cabinet is particularly dirty, soak the cloth in a weak detergent solution and then wring the cloth dry. Use this cloth to wipe the cabinet, and then wipe it dry with a dry cloth.
- Do not allow any detergent to come into direct contact with the surface of the Wide Plasma Display. If water droplets get inside the unit, operating problems may result.
- Avoid contact with volatile substances such as insect sprays, solvents and thinner, otherwise the quality of the
 cabinet surface may be adversely affected or the coating may peel off. Furthermore, do not leave it for long periods
 in contact with articles made from rubber or PVC.

Note:

Do not allow a still picture to be displayed for an extended period, as this can cause a permanent ghost image to remain on the Wide Plasma Display.

Examples of still pictures include logos, video games, computer images, teletext and images displayed in 4:3 mode.

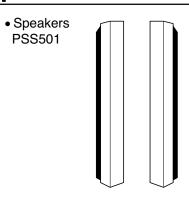
Accessories

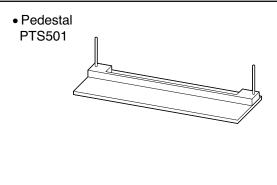
Accessories Supplied

Check that you have the Accessories and items shown Operating Instruction book Remote Control Transmitter EUR646527 CAA(R6) Battery × 2) RCA-BNC adapter plug × 4 Ferrite core Speaker Wire × 2

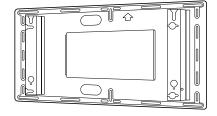
From the factory, these adapters have already been put on the rear input terminals.

Optional Accessories

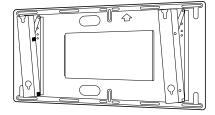




 Wall-hanging bracket (vertical) PWB501



• Wall-hanging bracket (angled) PWB502



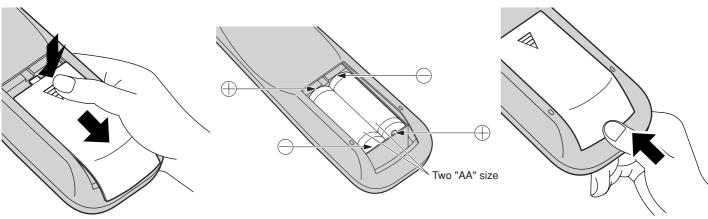
For assembling

Full instructions are supplied with each optional accessories for use with this Wide Plasma Display.

Remote Control Batteries

Requires two AA batteries.

- Turn the transmitter face down. Press and slide off the battery cover.
- Install the batteries as shown in the battery compartment. (Polarity + or – must match the markings in the compartment).
- 3. Replace the cover and slide it back in until the lock snaps.



Helpful Hint:

For frequent remote control users, replace old batteries with Alkaline batteries for longer life.

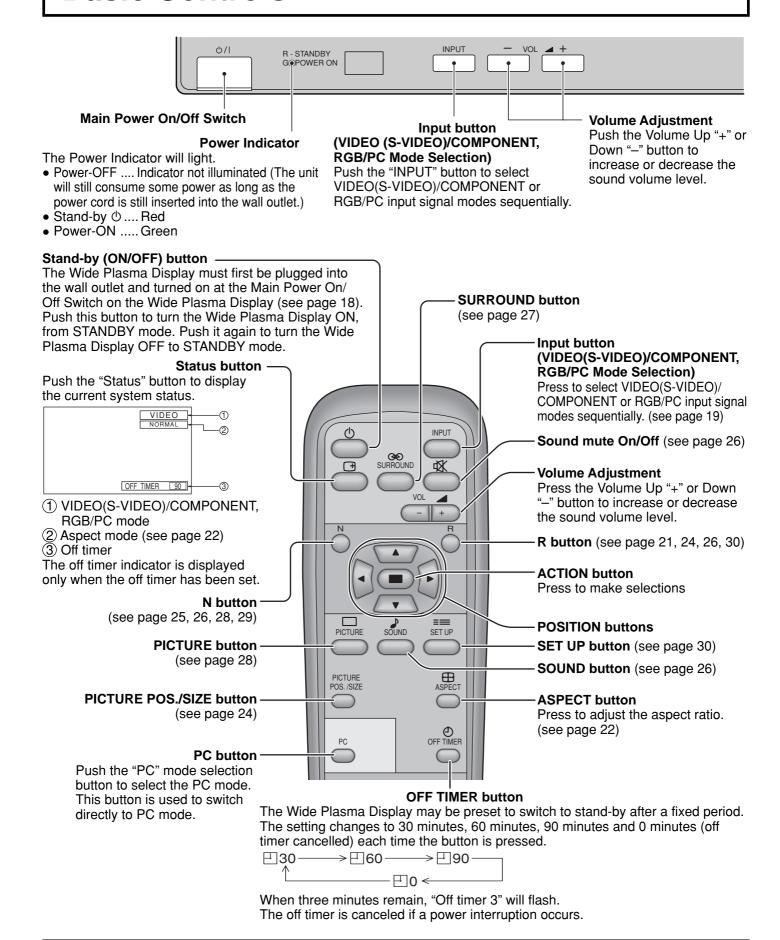
⚠ Precaution on battery use

Incorrect installation can cause battery leakage and corrosion that will damage the remote control transmitter.

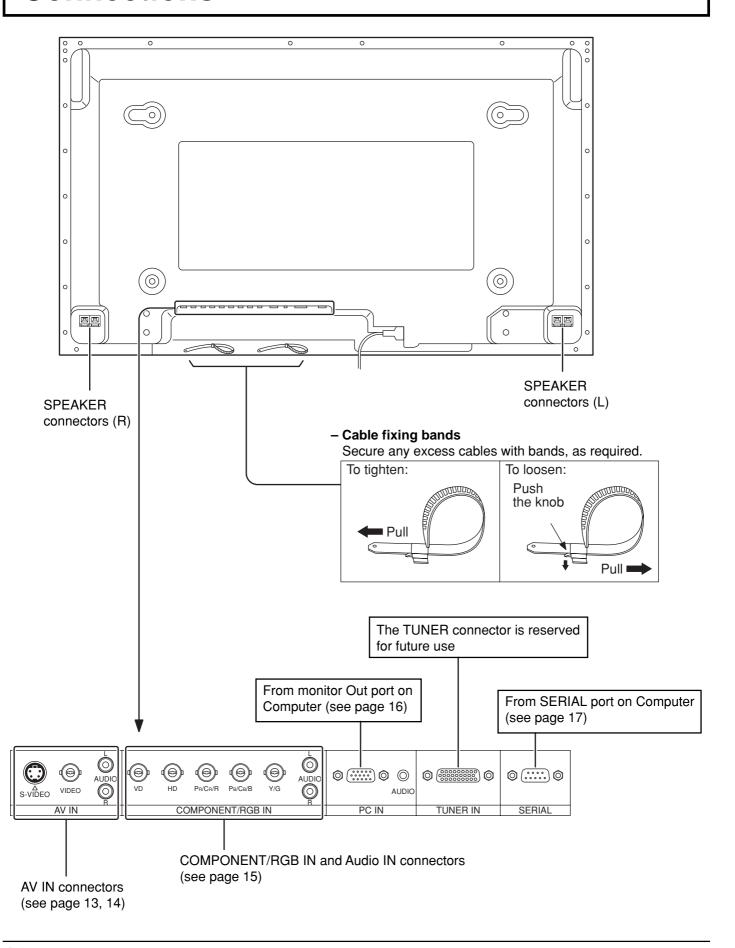
Observe the following precautions:

- 1. Batteries should always be replaced as a pair. Always use new batteries when replacing the old set.
- 2. Do not combine a used battery with a new one.
- 3. Do not mix battery types (example: "Zinc Carbon" with "Alkaline").
- 4. Do not attempt to charge, short-circuit, disassemble, heat or burn used batteries.
- 5. Battery replacement is necessary when the remote control acts sporadically or stops operating the Plasma Display.

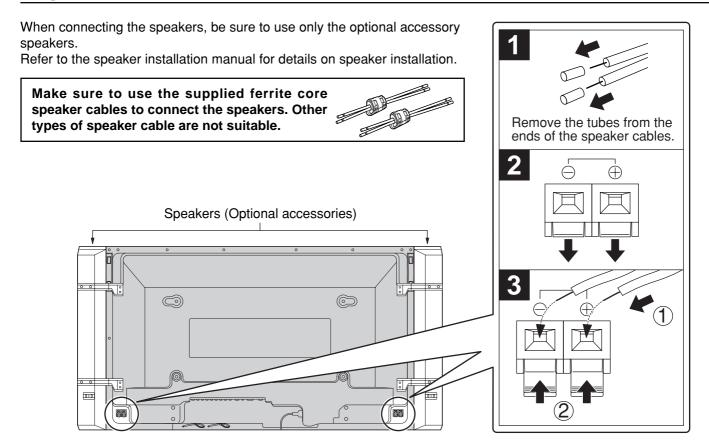
Basic Controls



Connections



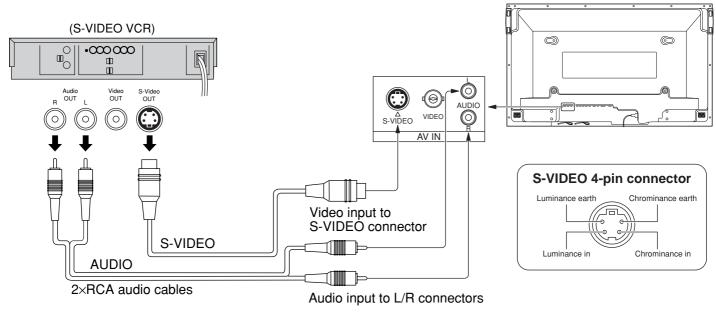
Speaker connection



AV Input connection

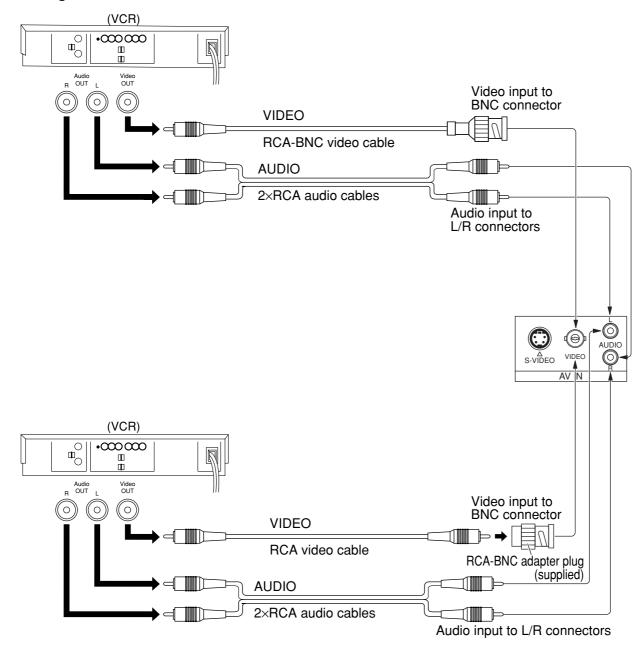
Connect the signal source equipment (see pages 14 to 17).

(Example) When connecting an S-VIDEO VCR



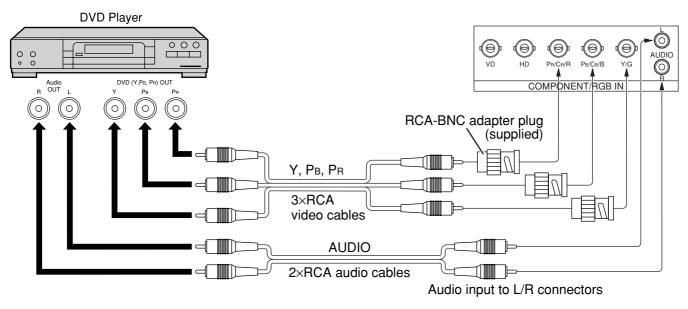
AV Input connection

VIDEO signal connection



COMPONENT/RGB Input connection

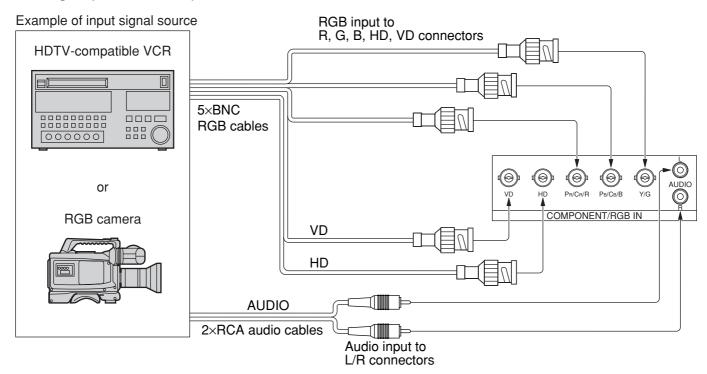
Component signals (Y, PB, PR) connection



Notes:

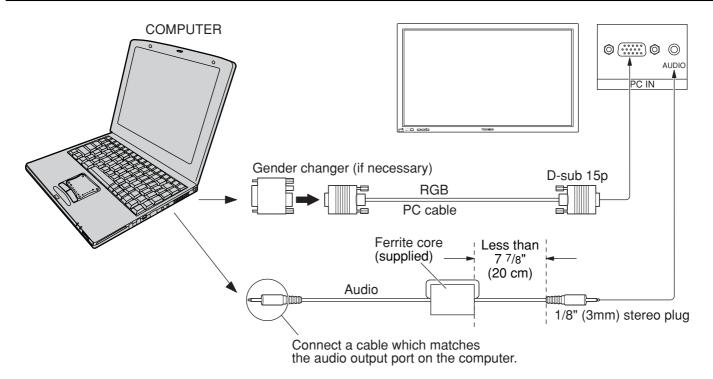
- (1) Change the "COMPONENT/RGB-IN" setting in the "SET UP" menu to "Y/PB/PR". (see page 30, 32)
- (2) Additional equipment and cables shown are not supplied with this set.

RGB signal (R, G, B, HD, VD) connection



- (1) Change the "COMPONENT/RGB-IN" setting in the "SET UP" menu to "RGB". (see page 30, 32)
- (2) Additional equipment and cables shown are not supplied with this set.

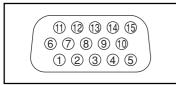
PC Input connection



Notes:

- (1) Computer signals which can be input are those with a horizontal scanning frequency of 15.5 to 110 kHz and vertical scanning frequency of 48 to 120 Hz. (However, signals exceeding 1200 lines may not be displayed properly.)
- (2) The signal resolution is a maximum of 1024×768 dots when the aspect mode is set to "NORMAL", and 1366×768 dots when the aspect mode is set to "FULL". If the signal resolution exceeds these maximums, it may not be possible to show fine detail with sufficient clarity.
- (3) The PC input terminals are DDC1/2B-compatible. If the computer being connected is not DDC1/2B-compatible, you will need to make setting changes to the computer at the time of connection.
- (4) Some PC models cannot be connected to the set.
- (5) There is no need to use an adapter for computers with an MS-DOS 5 (or greater) compatible D-sub 15P port.
- (6) The computer shown in the illustration is for example purposes only.
- (7) Additional equipment and cables shown are not supplied with this set.
- (8) Do not set the horizontal and vertical scanning frequencies on the PC for PC signals which are above or below the specified frequency range.

Signal Names for D-sub 15P Connector

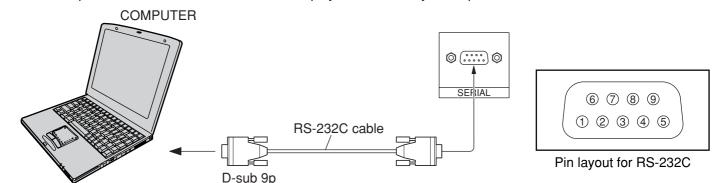


Pin layout for PC input terminal

Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
1	R	6	GND (Ground)	11)	GND (Ground)
2	G	7	GND (Ground)	12	SDA
3	В	8	GND (Ground)	13	HD/SYNC
4	GND (Ground)	9	NC (not connected)	14	VD/SYNC
5	GND (Ground)	10	GND (Ground)	15	SCL

SERIAL connection

The SERIAL port is used when the Wide Plasma Display is controlled by a computer.



Notes:

- (1) Use the RS-232C cable to connect the computer to the Wide Plasma Display.
- (2) The computer shown is for example purposes only.
- (3) Additional equipment and cables shown are not supplied with this set.

The SERIAL port conforms to the RS-232C interface specification, so that the Wide Plasma Display can be controlled by a computer which is connected to this port.

The computer will require software which allows the sending and receiving of control data which satisfies the conditions given below. Use a computer application such as a software programming language. Refer to the documentation for the computer application for details.

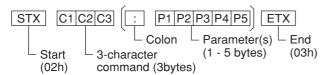
Communication parameters

Signal level	RS-232C compliant
Synchronization method	Asynchronous
Baud rate	9600 bps
Parity	None
Character length	8 bits
Stop bit	1 bit
X parameter	None
S parameter	None

RS-232C Pin assignment		
Pin number	Signal	
2	RXD	
3	TXD	
5	GND	
4.6	NC	
⑦ ⑧	Shorted	
1.9	NC	

Basic format for control data

The transmission of control data from the computer starts with a STX signal, followed by the command, the parameters, and then an ETX signal in that order. If there are no parameters, then the parameter signal does not need to be sent.



Note:

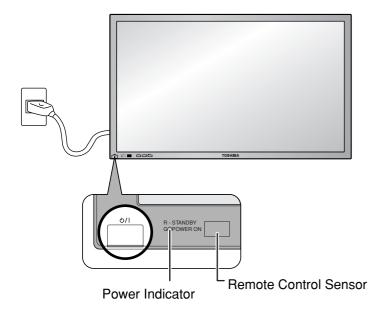
- (1) If multiple commands are transmitted, be sure to wait for the response for the first command to come from this unit before sending the next command.
- (2) If an incorrect command is sent by mistake, this unit will send an "ER401" command back to the computer.

Command

Command	Parameter	Control details
PON	None	Power ON
POF	None	Power OFF
AUU	None	Volume increase
AUD	None	Volume decrease
AMT	None	Mute (toggle)
IIS	None	Input select (toggle)
	VID	AV Mode
	YP1	Component / RGB mode (processed as
		Y/PB/PR or RGB signals as set by this unit)
	RG1	PC mode
DAM	None	Screen mode select (toggle)
	NORM	NORMAL (4:3)
	ZOOM	ZOOM
	FULL	FULL
	JUST	JUST
	SELF	AUTO

Power ON/OFF and Input Signal Selection

Power ON/OFF



Connecting the plug to the Wall Outlet

Push the POWER switch on the Wide Plasma Display to turn the set on POWER-ON

Power Indicator: Green

Example: The screen below is displayed for a while after the Wide Plasma Display is turned on. (setting condition is an example.)

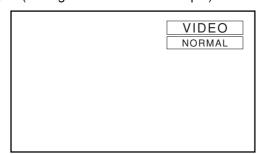
When the POWER is turned on for the first time, the LANGUAGE selection screen is displayed.

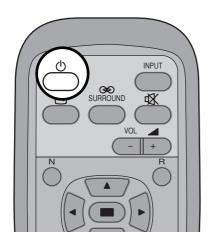
From the second time on, language selection can be done from the setup menu. (see page 21)

Select the desired language using the ▲ and ▼ keys and press the store ■ button.



From the second time on, the screen shown below is displayed (setting condition is an example).







Press the 🖒 button on the remote control to turn the Wide Plasma Display off

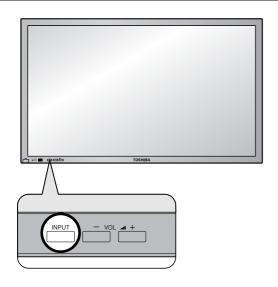
Power Indicator: Red (standby)

Press the () button on the remote control to turn the Wide Plasma Display on

Power Indicator: Green

To turn the power for the Wide Plasma Display off, press the () switch on the Wide Plasma Display, when the Wide Plasma Display is on or in standby mode.

Select the Input Signal







Press the INPUT button to select the input video signal desired from equipment such as a VCR which has been connected to the Wide Plasma Display.

Input signals will change as follows:

For COMPONENT INPUT (see page 30)

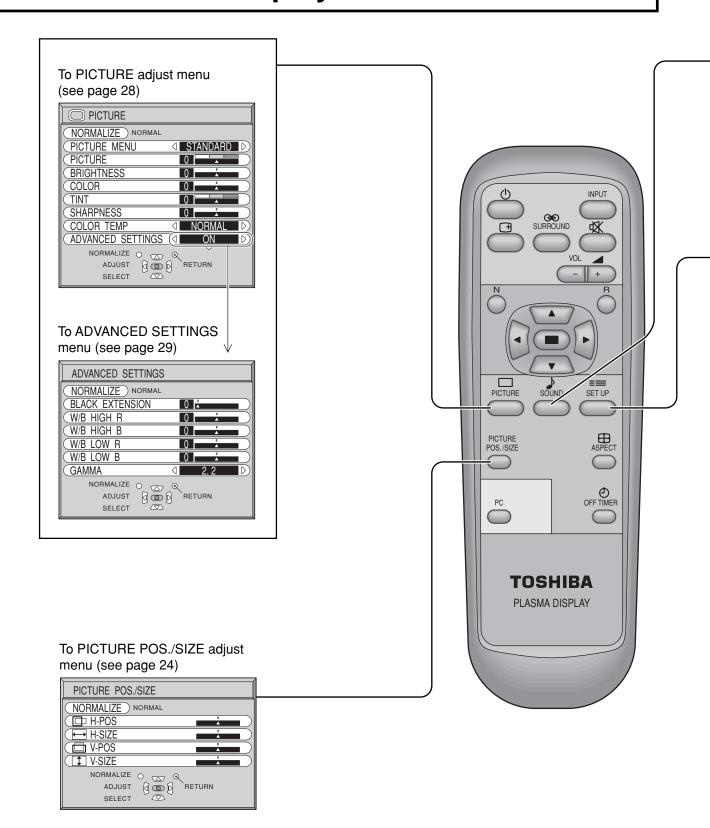


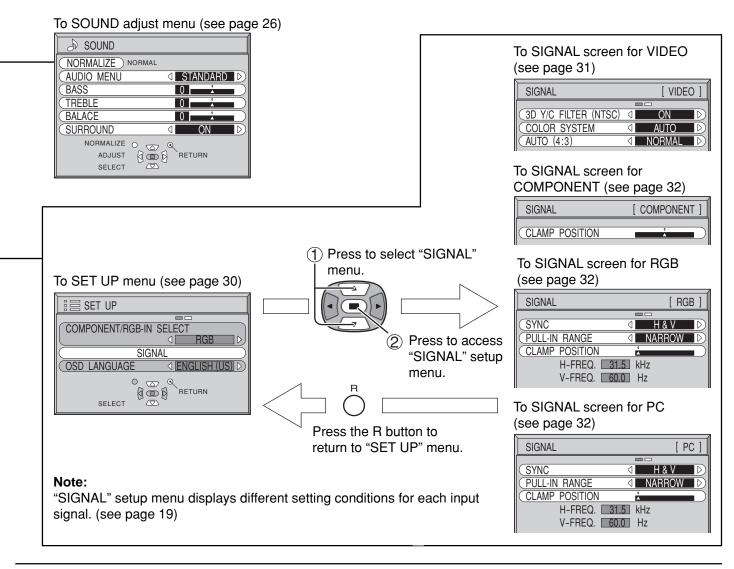
For RGB INPUT (see page 30)



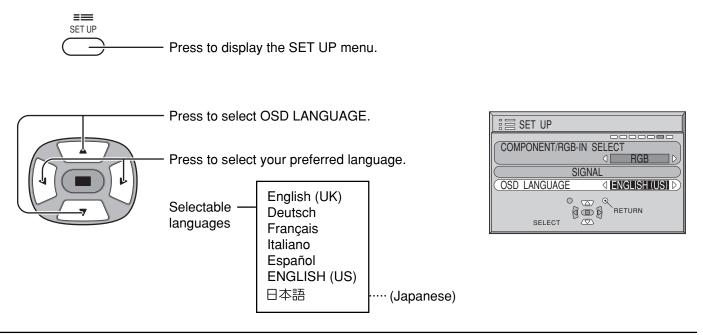


On-Screen Menu Display from Remote Control



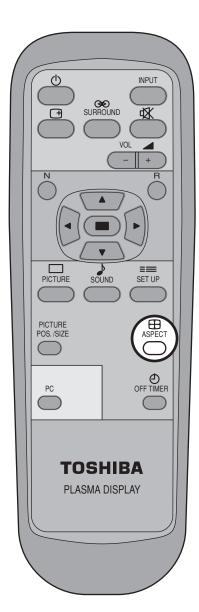


Selecting the On-Screen Menu Language



ASPECT Controls

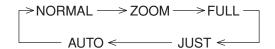
The Wide Plasma Display will allow you to enjoy viewing the picture at its maximum size, including wide screen cinema format picture.





ASPECT button

The aspect mode changes each time the ASPECT button is pressed.

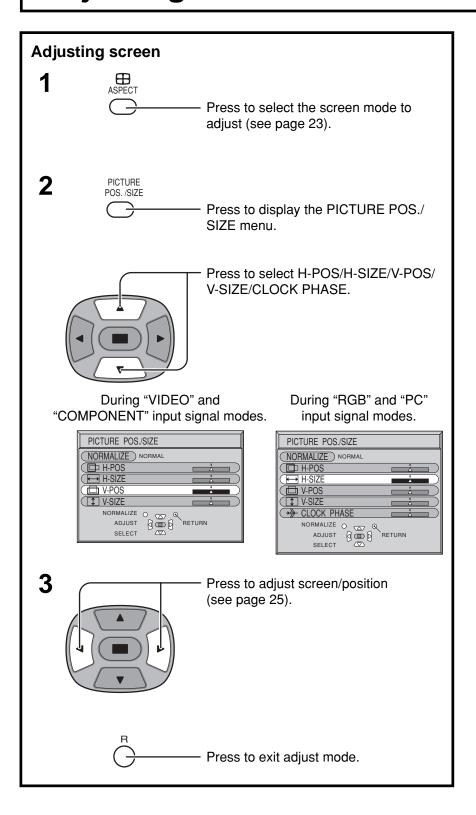


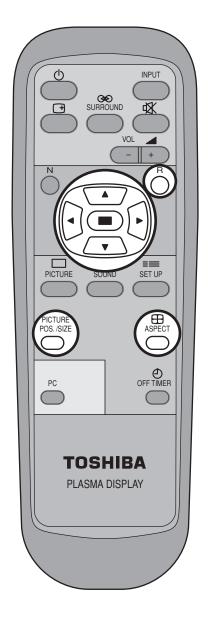
- (1) During RGB and PC input signal modes, the mode switches between "NORMAL" and "FULL" only.
- (2) For a 525p (480p) signal input using "COMPONENT" input signal mode, the mode switches between "ZOOM" and "FULL" only.
- (3) For a 1125i (1080i), 750p (720p) signal input using "COMPONENT" input signal mode, the mode is set to "FULL" mode, and switching is not possible. For a 525i (480i), 625i (575i) signal input using "Component" input signal mode, "Auto" cannot be selected.
- (4) The aspect mode is stored separately for each input terminal (VIDEO, COMPONENT, RGB and PC).

Mode	Picture	Explanation
NORMAL	NORMAL 3	NORMAL mode will display a 4:3 picture at its standard 4:3 size.
ZOOM	3 → 16 200M 9	ZOOM mode magnifies the central section of the picture.
FULL	3 → 16 FULL 9 9	FULL mode will display the picture at its maximum size but with sight elongation.
JUST	3 → 16 JUST 9 9	JUST mode (TheaterWide®) will display a 4:3 picture at its maximum size but with aspect correction applied to the center of the screen so that elongation is only apparent at the left and right edges of the screen. The size of the picture will depend on the original signal.
AUTO	For an elongated image Auto 9	Auto mode will automatically enlarge the display (depending on the picture source), allowing you to view the picture at its maximum size. Note: AUTO mode is designed to automatically adjust the aspect ratio to handle a mix of 16:9 and 4:3 program material.
	Changes in accordance with the AUTO mode setting (see page 31)	Certain 4:3 program material, such as stock market data screens, may occasionally cause the image size to change unexpectedly. When viewing such programs, it is recommended that the ASPECT be set to NORMAL.

- (1) Do not allow 4:3 mode to be displayed for an extended period, as this can cause a permanent ghost image to remain on the Plasma Display Panel.
- (2) The S-VIDEO terminal on this set can detect specially encoded signals that are compatible with a wide screen monitor. When a full image from the S-VIDEO terminal of specially encoded video is detected by the set, the screen size is automatically set to FULL mode.

Adjusting PICTURE POS./SIZE





- (1) Adjustment details are stored separately for different input signal formats (Adjustments for component signals are stored for 525i (480i), 625i (575i), 525p (480p), 1125i (1080i) and 750p (720p) each, and RGB/PC signals are stored for each frequency.)
- (2) If a "Cue" or "Rew" signal from a VCR or DVD player is received, the picture position will shift up or down. This picture position movement cannot be controlled by the PICTURE POS./SIZE function.

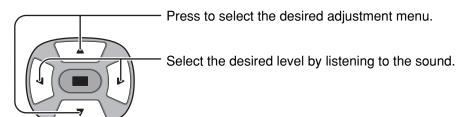
	" "	<i>"</i>		
H-POS	When the Position Left "◄" button is pressed —————————————————————————————————	When the Position Right "▶" button is pressed →		
	When the Position Left "◄" button is pressed	When the Position Right "▶" button is pressed		
H-SIZE	0 0 -	-		
	When the Position Left "◄" button is pressed	When the Position Right "▶" button is pressed		
V-POS	1			
	When the Position Left "◄" button is pressed	When the Position Right "▶" button is pressed		
V-SIZE	0 0	t O		
CLOCK PHASE (RGB/PC in Mode)	Flickering and distortion can be eliminated by using the Position Left "◀" or Right "▶" button to carry out adjustment.			

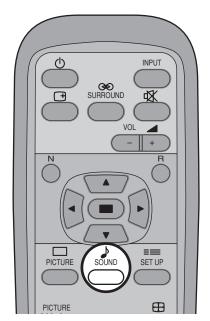
Helpful Hint (NORMALIZE Normalization)

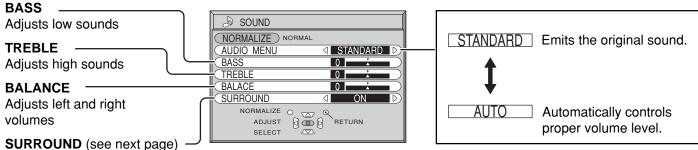
While the PICTURE POS./SIZE display is active, if either the N button on the remote control is pressed at any time or the (ACTION button) is pressed during "NORMALIZE", then all adjustment values are returned to the factory settings.

SOUND Adjustment

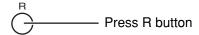
- 1 Press the SOUND [▶] button to display the SOUND menu.
- 2 Select to adjust each item.







• To end adjustments



Note:

Press the SURROUND button to directly turn the surround effect ON and OFF. (see page 27)

- Helpful Hint (Normalize Normalization)

While the "SOUND" menu is displayed, if either the N button on the remote control is pressed at any time or the (ACTION button) is pressed during "NORMALIZE", then all adjustment values are returned to the factory settings.

Mute

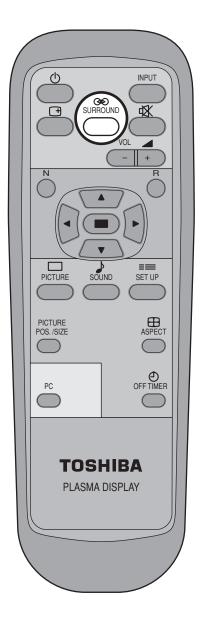
Useful when answering the phone or receiving unexpected visitors.



Press this button to mute the sound.

Press again to reactivate sound. Sound is also reactivated when power is turned off or volume level is changed.

SURROUND Controls



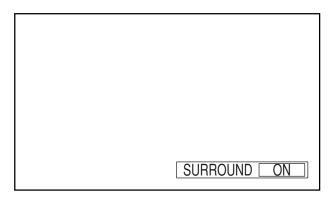


SURROUND Button

The benefits of surround sound are enormous. You can be completely enveloped in sound; just as if you were at a concert hall or cinema.

The surround setting switches on and off each time the SURROUND button is pressed.





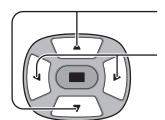
Note:

The surround settings are stored separately for each SOUND mode (AUTO, STANDARD).

PICTURE Adjustments

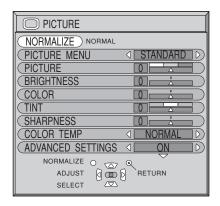
Press the PICTURE button on the Remote Control to display the PICTURE menu.

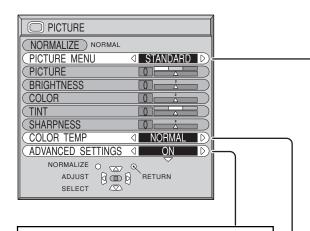
Select to adjust each item.



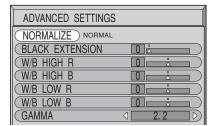
Press to select the menu to adjust.

Select the desired level by looking at the picture behind the menu.



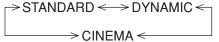


Press the left ◀ or right ▶ button to select "ON". Press the down ▼ button to enter ADVANCED SETTINGS mode. ADVANCED SETTINGS ON Enables fine picture adjustment at a professional level (see page 29).



ADVANCED SETTINGS OFF Displays images with settings of the PICTURE menu.

Press the left ◀ or right ▶ button to switch between modes.



STANDARD STANDARD



For viewing in standard (evening lighting) environments.

This menu selects the normal levels of BRIGHTNESS and PICTURE.

DYNAMIC



DYNAMIC

For viewing in brighter environments. This menu selects higher than normal levels of BRIGHTNESS and PICTURE.

CINEMA

CINEMA

Ideal for movies.

• Can be selected for VIDEO/ COMPONENT.

Note:

If you would like to change the picture and color of the selected PICTURE menu, adjust using the items in the PICTURE menu. (see page 29)

Press the left ◀ or right ▶ button to switch between modes.

 \rightarrow NORMAL \longleftrightarrow COOL \longleftrightarrow WARM <



- Helpful Hint (Normalize Normalization)

While the "PICTURE" menu is displayed, if either the N button on the remote control is pressed at any time or the ((ACTION button) is pressed during "NORMALIZE", then all adjustment values are returned to the factory settings.

Item	Ef	fect	Adjustments
PICTURE	Less	More	Selects the proper brightness and density for the room.
BRIGHTNESS	Darker	Brighter	Adjusts for easier viewing of dark pictures such as night scenes and black hair.
COLOR	Less	More	Adjusts slightly to a lighter color.
TINT (NTSC only)	Reddish	Greenish	Adjusts skin color.
SHARPNESS	Less	More	Displays a sharp image.

Notes:

- (1) "COLOR", "TINT" and "SHARPNESS" settings cannot be adjusted for "RGB" and "PC" input signal modes.
- (2) You can change the level of each function (CONTRAST, BRIGHTNESS, COLOR, TINT, SHARPNESS) for each PICTURE menu.
- (3) The setting details for normal, dynamic and cinema are stored separately for each input mode (VIDEO, COMPONENT, RGB and PC).
- (4) The "TINT" setting can be adjusted for NTSC signal only.

Note:

There is little change when PICTURE is increased with a bright picture or reduced with a dark picture.

ADVANCED SETTINGS

Item	Eff	ect	Details
BLACK EXTENSION	Less	More	Adjusts the dark shades of the image in gradation.
W/B HIGH R	Less	More	Adjusts the white balance for light red areas.
W/B HIGH B	Less	More	Adjusts the white balance for light blue areas.
W/B LOW R	Less	More	Adjusts the white balance for dark red areas.
W/B LOW B	Less	More	Adjusts the white balance for dark blue areas.
GAMMA	Down	Up	$2.0 \longleftrightarrow 2.2 \longleftrightarrow 2.5$

Notes:

- (1) Carry out "W/B" adjustment as follows.
 - Adjust the white balance of the bright sections using the "W/B HIGH R" and "W/B HIGH B" settings.
 - (B) Adjust the white balance of the dark sections using the "W/B LOW R" and "W/B LOW B" settings.
 - C Repeat steps (A) and (B) to adjust.

Steps (A) and (B) affect each other's settings, so repeat each step in turn to make the adjustment.

- (2) The adjustment values are stored separately for each input mode (VIDEO, COMPONENT, RGB and PC).
- (3) The adjustment range values should be used as an adjustment reference.

While the "ADVANCED SETTINGS" menu is displayed, if either the N button on the remote control is pressed at any time or the (ACTION button) is pressed during "NORMALIZE", then all adjustment values are returned to the factory settings.

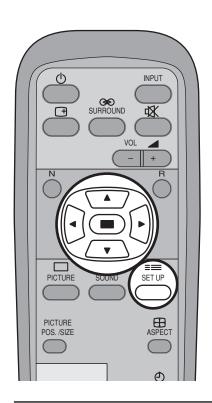
SET UP for Input Signals

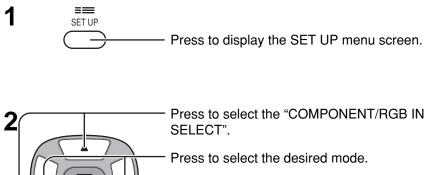
COMPONENT/RGB IN SELECT

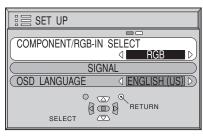
Select to match the signals from the source connected to the COMPONENT/RGB input terminals.

Y, PB, PR signals ⇒ "COMPONENT"

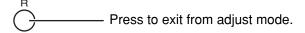
R, G, B, HD, VD signals ⇒ "RGB"





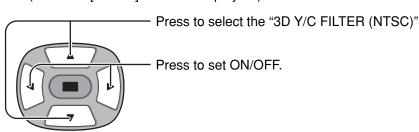


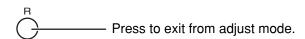


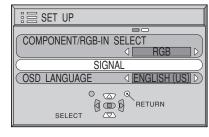


3D Y/C FILTER - For NTSC Video images

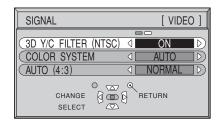
Select the SIGNAL from the "SET UP" menu during VIDEO (S-VIDEO) input signal mode. ("SIGNAL [VIDEO]" menu is displayed.)







Press (store) button

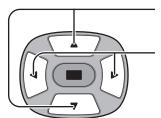


Note:

When on, this setting only affects NTSC input signals.

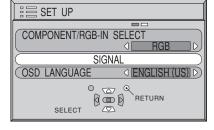
COLOR SYSTEM / AUTO

Select SIGNAL from the "SET UP" menu during VIDEO (S-VIDEO) input signal mode. ("SIGNAL [VIDEO]" menu is displayed.)

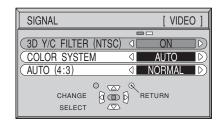


Press to select the "COLOR SYSTEM" or "AUTO".

Press to select each function.



☐ Press (store) button

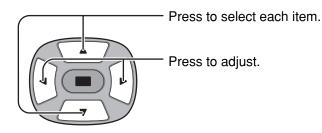


If the picture image becomes unstable:

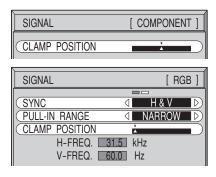
With the system set on Auto, under conditions of low level or noisy input signals the image may in rare cases become unstable. Should this occur, set the system to match the format of the input signal.

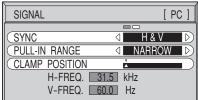
Mode	Function
Color system	Set the color system to match the input signal. If set to "AUTO", the color system is determined automatically.
	>AUTO <> PAL <> SECAM <> M·NTSC << NTSC <
AUTO (4:3)	Set to "NORMAL" to view 4:3 images in an unchanged format when AUTO is selected. If you would like to view 4:3 images in "Just" format, set to "JUST".

Select SIGNAL from the "SET UP" menu during RGB or PC input signal mode.



The following operation methods are the same for both the SIGNAL [RGB] and SIGNAL [PC].





SYNC

Setting RGB sync signal setting:

Confirm that the input is set to RGB INPUT (this setting is valid only for RGB INPUT).

H&V: The H and V sync signals are input from the HD/VD (BNC) connector. ON G:

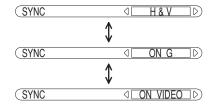
Uses a synchronized signal on the Video G signal, which is input

from the G (BNC) connector.

ON VIDEO: Compatible with the scart plug (Europe)

The composite video signal input from the VIDEO input terminal is

used by dividing the sync signals.



Setting PC sync signal setting:

Confirm that the input is set to PC INPUT (this setting is valid only for PC INPUT).

H&V: The H and V sync signals are input from the HD/VD (BNC) connector.

ON G: Uses a synchronized signal on the Video G signal, which is input from the G (BNC) connector.

PULL IN RANGE

Sets the width for different frequencies.

(This setting is the same for both SIGNAL [RGB] and SIGNAL [PC].)

PULL IN RANGE √ WIDE √

□ NARROW ▷

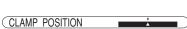
PULL IN RANGE

CLAMP POSITION

Adjusts the clamp position.

The following operation methods are the same for "SIGNAL" menu during COMPONENT, RGB and PC input signal mode.

Normally, these adjustments are set to appropriate levels and, therefore, do not need to be altered.

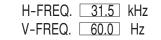


H-FREQ (kHz)/V-FREQ (Hz)

Displays the H (Horizontal)/V (Vertical) frequencies.

This display is valid only for RGB input and PC input. Display range:

Horizontal 15.5 - 110 kHz Vertical 48 - 120 Hz



Troubleshooting

Before you call for service, determine the symptoms and make a few simple checks as shown below.

Symp	otoms	Checks
Picture	Sound	Gliecks
Interference	Noisy Sound	Electrical Appliances Cars/Motorcycles Fluorescent light
Normal Picture	No Sound	Volume (Check whether the mute function has been activated on the remote control.)
? No Picture	No Sound	Not plugged into AC outlet. Not switched on. Check PICTURE and BRIGHTNESS/ Volume setting by pushing the power switch or stand-by button on the remote control.
? No Picture	Normal Sound	If a signal with a non-applicable color system format, or frequency is input, only the input terminal indication is displayed.
No Color	Normal Sound	Color controls set at minimum level. Color system (see page 28, 29)

Plasma Display panel

Symptoms	Check
Some parts of the screen do not light up	The plasma display panel is manufactured using an extremely high level of precision technology, however, sometimes some parts of the screen may be missing picture elements or have luminous spots. This is not a malfunction.
TOSHIBA	Do not allow a still picture to be displayed for an extended period, as this can cause a permanent ghost image to remain on the Wide Plasma Display. Examples of still pictures include logos, video games, computer images, teletext and images displayed in 4:3 mode.
Ghost images appear	Note: The permanent ghost image on the Plasma Display resulting from fixed image use is not an operating defect and as such is not covered by the Warranty. This product is not designed to display fixed images for extended periods of time.
Whirring sounds can be heard from the display unit.	The display unit is fitted with a cooling fan to dissipate heat generated during normal use. The whirring sound is caused by rotation of the fan and is not a malfunction.

Specifications

	50HP81	
Power Source	120 V AC, 50/60 Hz	
Power Consumption		
Normal use	Max. Amps 5.5 A	
Stand-by condition	2.4 W	
Power off condition	0.7 W	
Plasma Display panel	Drive method AC type	
respectively position	50-inch, 16:9 aspect ratio	
Contrast Ratio		3000:1
Brightness Capability	(Panel d	only) 500 cd / m ²
	·	set) 300 cd / m ²
Screen size	1106 mm (W) × 622 mm (H) × 1269 mm (diagonal)	
	No. of pixels	
		× 768 (H)) [4,098 × 768 dots]
Operating condition		
Temperature	34°F - 104°F (0°C - 40°C)	
Humidity	20% - 80%	
Applicable signals		
Color System	NTSC, PAL, PAL60, SECAM, Modified NTSC	
Scanning format	525i (480i), 625i (575i), 525p (480p), 750p (720p), 1125i(1080i)	
PC signals	XGA display	
3	VGA, SVGA	
	SXGA, UXGA (compressed)	
	Horizontal scanning frequency 15.5 - 110 kHz	
	Vertical scanning frequency 48 - 120 Hz	
Connection terminals		
AV	Video IN (BNC)	1.0 Vp-p (75-ohm)
	S-VIDEO IN (MINI DIN 4PIN)	Y: 1 Vp-p (75-ohm), C: 0.286 Vp-p (75-ohm)
	AUDIO IN (RCA PIN JACK × 2)	0.5 Vrms (high impedance)
COMPONENT/RGB	Y/G (BNC)	1.0 Vp-p/composite (75-ohm)
		0.7 Vp-p/non-composite (75-ohm)
	PB/B (BNC)	0.7 Vp-p (75-ohm)
	PR/R (BNC)	0.7 Vp-p (75-ohm)
	HD (BNC)	1.0 - 5.0 Vp-p (high impedance)
	VD (BNC)	1.0 - 5.0 Vp-p (high impedance)
	AUDIO IN (RCA PIN JACK × 2)	0.5 Vrms (high impedance)
PC	(HIGH-DENSITY D-SUB 15PIN)	R,G,B/0.7 Vp-p (75-ohm)
		HD, VD/1.0 - 5.0 Vp-p (high impedance)
	AUDIO IN (M3.5 JACK)	0.5 Vrms (high impedance)
SERIAL	EXTERNAL CONTROL TERMINAL (D-SUB9PIN) RS-232C COMPATIBLE	
SPEAKERS (6 Ω)	16W [8 W + 8 W] (10% THD)	
	For	PSS501 only

		50HP81	
Ac	cessories Supplied		
	Remote Control Transmitter	EUR646527	
	Batteries	2 × AA Size	
	RCA-BNC adapter plug	4 p	
	Ferrite core	1 p	
	Speaker Wire	1 sets	
Op	tional Supplied	al Supplied	
	Speakers	PSS501	
	Pedestal PTS501		
	Wall-hanging bracket (vertical)	PWB501	
	Wall-hanging bracket (angled)	PWB502	
Dimensions (W × D × H)		47.6" (1210 mm) × 28.5" (724 mm) × 3.9" (98mm) 47.6" (1210 mm) (98 mm) (EE + 72) (EE + 72) (SZ	
		approx. 99.2 lbs (main unit only) approx. 109.3 lbs (with speakers)	

Note

Design and specifications are subject to change without notice. Weight and dimensions shown are approximate.

Limited United States Warranty

Products purchased in the U.S.A. and used in Canada are not covered by these warranties. Products Purchased in Canada and used in the U.S.A. are not covered by these warranties.

Toshiba America Consumer Products, Inc. ("TACP") and Toshiba Hawaii Inc. ("THI") make the following limited warranties. These limited warranties extend to the original consumer purchaser or any person receiving this set as a gift from the original consumer purchaser and to no other purchaser or transferee.

Limited One (1) Year Warranty

TACP and THI warrant this product and its parts against defects in materials or workmanship for a period of one (1) year after the date of original retail purchase. During this period, TACP and THI will repair or replace a defective part, at their option, with a new or refurbished part, without charge to you. TACP/THI Authorized Service Station personnel will come to your home when warranty service is required. Depending on the type of repair required, the service will either be performed in your home or the set will be taken to the TACP/THI Authorized Service Station for repair and returned to your home at no cost to you.

Where in-home service is not available via Toshiba's Authorized Service network, Toshiba will fulfill its obligation for warranty service via other appropriate means to be determined by Toshiba including, but not limited to, exchange, refund or shipping to and from an Authorized Service Center for repair.

Rental Units

The warranty for rental units begins with the first rental or thirty (30) days from the date of shipment to the rental firm, whichever comes first.

Commercial Units

Products sold and used for commercial use have a limited ninety (90) day warranty for all parts and labor.

Owner's Manual and Demographic Card

You should read this owner's manual thoroughly before operating this product. You should complete and mail the enclosed Demographic card within ten days after you, or the person who has given you this product as a gift, purchased this product. This is one way to enable TACP/THI to provide you with better customer service and improved products. Failure to return the Demographic card will not affect your rights under this warranty.

Your Responsibility

The above warranties are subject to the following conditions;

- (1) You must retain your bill of sale or provide other proof of purchase.
- (2) All warranty servicing of this product must be made by an Authorized TACP/ THI Service Station.
- (3) These warranties are effective only if the product is purchased and operated in the U.S.A. or Puerto Rico.
- (4) Labor service charges for set installation, set up, adjustment of customer controls and installation or repair of antenna systems are not covered by this warranty. Reception problems caused by inadequate antenna systems are your responsibility.
- (5) Warranties extend only to defects in materials or workmanship as limited above and do not extend to any product or parts which have been lost or discarded by you or to damage to products or parts caused by misuse, accident, damage caused by Acts of God, such as lightning or fluctuations in electric power, improper installation, improper maintenance or use in violation of instructions furnished by us; or to units which have been modified or had the serial number removed, altered, defaced or rendered illegible.

How to Obtain Warranty Service

If after following all of the operating instructions in this manual and checking the section "BEFORE CALLING SERVICE PERSONNEL", you find that service is needed;

- (1) Call the TACP toll free number 1-800-631-3811 after you find a defective product or part to find the nearest TOSHIBA Authorized Service Station.
- (2) Please present your bill of sale or other proof to the Authorized Service Station. "TACP/THI Authorized Service Station personnel will come to your home when warranty service is required. Depending on the type of repair required, the service will either be performed in your home or the set will be taken to the TACP/THI Authorized Service Station for repair and returned to your home at no cost to you."

For additional information, visit our web site:
www.toshiba.com/tacp

In Hawaii contact:

Toshiba Hawaii, Inc. 327 Kamakee Street. Honolulu, Hawaii 96814 (808) 591 -9281

All warranties implied by state law, including the implied warranties of merchantability and fitness for a particular purpose, are expressly limited to the duration of the limited warranties set forth above. With the exception of any warranties implied by state law as hereby limited, the foregoing warranty is exclusive and in lieu of all other warranties, guarantees, agreements and similar obligations of manufacturer or seller with respect to the repair or replacement of any parts. In no event shall TACP or THI be liable for consequential or incidental damages.

No person, agent, distributor, dealer or company is authorized to change, modify or extend the terms of these warranties in any manner whatsoever. The time within which action must be commenced to enforce any obligation of TACP or THI arising under this warranty or under any state, or law of the United States or any state thereof, is hereby limited to 90 days from the date you discover or should have discovered, the defect. This limitation does not apply to implied warranties arising under state law.

This warranty gives you specific legal rights and you may also have other rights which may vary from state to state. Some states do not allow limitation on how long an implied warranty lasts, when an action may be brought, or the exclusion or limitation of incidental or consequential damages, so the above provisions may not apply to you.

– IMPORTANT –



LIMITED CANADIAN WARRANTY

Products purchased in Canada and used in the U.S.A. are not covered by these warranties. Products purchased in the U.S.A. and used in Canada are not covered by these warranties.

CANADIAN EXTENDED WARRANTY

To obtain a "CANADIAN EXTENDED WARRANTY" the consumer must complete and forward the attached "CANADIAN EXTENDED WARRANTY REGISTRATION FORM" to TOSHIBA of CANADA LIMITED, CONSUMER ELECTRONICS GROUP, WARRANTY REGISTRATION OFFICE, 191 McNABB STREET, MARKHAM, ON L3R 8H2, (envelope enclosed) within 30 days of purchase!

This warranty offer provides an extension of the manufacturer's parts and labour warranty provided that the consumer registers for a CANADIAN EXTENDED WARRANTY.

To obtain service under warranty, contact the nearest authorized TOSHIBA SERVICE CENTRE or the nearest TOSHIBA FACTORY SERVICE DEPARTMENT (list enclosed).

PRODUCTS UTILIZED FOR RENTAL OR COMMERCIAL PURPOSES ARE NOT COVERED BY THIS WARRANTY.

This warranty applies only to the original purchaser and is not transferable. This warranty does not apply to sets subjected to misuse, neglect, accident, act of God or improper installation.

Sets with serial number removed, altered, replaced or defaced will not be covered by this warranty. ALL IN-WARRANTY REPAIRS MUST BE MADE BY A TOSHIBA FACTORY SERVICE DEPARTMENT, OR BY AN AUTHORIZED TOSHIBA SERVICE CENTRE. REPAIRS MADE ELSEWHERE WILL INVALIDATE THIS WARRANTY.

THIS WARRANTY IS ONLY VALID WHEN THE SET IS PURCHASED FROM AN AUTHORIZED TOSHIBA DEALER AND USED IN CANADA.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, GUARANTIES OR AGREEMENTS, WHETHER EXPRESSED OR IMPLIED, AND NO PERSON, AGENT, DISTRIBUTOR, DEALER, SERVICE CENTRE OR COMPANY IS AUTHORIZED TO CHANGE, MODIFY OR EXTEND ITS TERMS IN ANY MANNER WHATSOEVER.

IMPORTANT: Also keep your "Bill of Sale" as proof of purchase.

WARRANTY: IN-HOME SERVICE

TYPE OF SET: PDP

PARTS: 12 MONTHS LABOUR: 12 MONTHS REMOTE CONTROL: 12 MONTHS

Thank you for purchasing this fine product from one of our authorized:

CANADIAN TOSHIBA DEALERS

(Detach)

	(Detach)				
	CANADIAN EXTENDED WAR	RANTY REGISTRATION FORM			
	Please complete and mail this card immediately.				
	MODEL NO.	SERIAL NO			
	DATE PURCHASED	INVOICE NO.			
	YOUR NAME				
0	ADDRESS				
	CITY PROVINCE	POSTAL CODE			
	DEALER NAME				
	CITY PROVINCE				

TOSHIBA AMERICA CONSUMER PRODUCTS, INC.

SERVICE DIVISION/82 TOTOWA ROAD, WAYNE, NEW JERSEY 07470 NATIONAL SERVICE DIVISION:1420B TOSHIBA DRIVE, LEBANON, TN. 37087 "www.toshiba.com/tacp"

TOSHIBA HAWAII, INC.

SERVICE DIVISION/327 KAMAKEE STREET, HONOLULU, HAWAII 96814, U.S.A. TEL: (808) 591-9281

TOSHIBA OF CANADA LTD.

HEAD OFFICE/191 McNABB STREET MARKHAM, ONTARIO L3R 8H2, CANADA TEL: (905) 470-5400
SERVICE CENTERS/TORONTO: 191 McNABB STREET MARKHAM, ONTARIO L3R 8H2, CANADA TEL: (905) 470-5400
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